Please find below and/or attached an Office communication concerning this application or proceeding.

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>01 August 2001</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-15_ is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1,3-5 and 7-12_ is/are rejected.

7)☒ Claim(s) _2,6 and 13-15_ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>01 August 2001</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a)☐ All b)☐ Some * c)☐ None of:

         1.☐ Certified copies of the priority documents have been received.

         2.☐ Certified copies of the priority documents have been received in Application No. _____.

         3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>1/29/04 & 3/15/04</u>.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Non-Final Office Action

Claim Rejections - 35 USC § 101

1.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2.   Claims 9-11 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 9 claims a recording medium on which a data structure is stored and variations thereof. These claims therefore are interpreted as recording a data structure per se. In order to overcome this rejection, language, specifically stating the claim, must be limited to a method, system, instructions stored on a computer readable medium, or the like that makes use of the data structure.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

4.   Claims 1, 3, 4, 5, and 7-12 are rejected under 35 U.S.C. 102(a) as being anticipated by Engel et al., U.S. Patent 6,115,393.

Referring to claims 1 and 5:

a.   In Figure 3, Engel et al. teach a handle identifying the originator protocol from which the request originated.

b.   In Figure 3, Engel et al. teach a forwarding handle identifying a protocol, which is the current parent of the protocol.

c.   In column 35, lines 6-30, Engel et al. disclose that an algorithm first determines whether the node is acting as a source node in any other TCP connection and, if so, whether the other connection is okay. If the node is performing satisfactorily as a source node in another TCP connection, the algorithm reports that there is no problem at the source node and returns to the diagnostic algorithm. If the algorithm cannot identify any other TCP connections involving this node that are okay, it moves up through the protocol stack checking each level for a problem. In this case, it then checks for DLL problems at the node when it is acting as a source node by calling an DLL problem checking routine. If a DLL problem is found, that fact is reported. If no DLL problems are found, algorithm checks for an IP problem at the node when it is acting as a source by calling an IP problem checking routine. If an IP problem is found, that fact is reported (sending the diagnostic message to the member of the group identified by the forwarding handle).

Referring to claims 3, 7, and 10, in Figure 3, Engel et al. teach including in the header to the message an identifier of the member and group which originated the message.

Referring to claims 4, 8, and 11, in Figure 3, Engel et al. teach including in the header to the message an identifier of the member and group of the parent protocol originator, if any, which originated the message.

Referring to claim 9:

a.   In Figure 3, Engel et al. teach a handle identifying the originator protocol

from which the request originated.

b.   In Figure 3, Engel et al. teach a forwarding handle identifying a protocol,

which is the current parent of the protocol.

Referring to claim 12:

a.   In Figure 3, Engel et al. teach a handle identifying the originator protocol

from which the request originated.

b.   In Figure 3, Engel et al. teach a forwarding handle identifying a protocol,

which is the current parent of the protocol.

c.   In column 35, lines 6-30, Engel et al. disclose that an algorithm first

determines whether the node is acting as a source node in any other TCP

connection and, if so, whether the other connection is okay. If the node is

performing satisfactorily as a source node in another TCP connection, the

algorithm reports that there is no problem at the source node and returns to the

diagnostic algorithm. If the algorithm cannot identify any other TCP connections

involving this node that are okay, it moves up through the protocol stack checking

each level for a problem. In this case, it then checks for DLL problems at the

node when it is acting as a source node by calling an DLL problem checking

routine. If a DLL problem is found, that fact is reported. If no DLL problems are

found, algorithm checks for an IP problem at the node when it is acting as a

source by calling an IP problem checking routine. If an IP problem is found, that

fact is reported (examining the forwarding handle at each member of the groups of the system to ascertain if that member was a parent of the protocol identified in the forwarding handle field of the header of the diagnostic message).

Allowable Subject Matter

5.   Claim 2, 6, and 13-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

6.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent 5,347,524	l'Anson et al.
U.S. Patent 6,721,274 B2	Hale et al.
U.S. Patent 6,763,023 B1	Gleeson et al.
US 2002/0075841 A1	Steer et al.
US 2004/0083299 A1	Dietz et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C Maskulinski whose telephone number is (703) 308-6674. The examiner can normally be reached on Monday-Friday 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert W Beausoliel can be reached on (703) 305-9713. The fax phone

number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MM

ROBERT BEAUSOLIEL
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100